

# Bay Community Health News

## Immunization Updates



**Thomas L. Hickner**  
County Executive

**Barbara M. MacGregor, RN, BSN**  
Public Health Director

**Author/Editor:**  
**Dominic Smith, BS**

**Format/Design:**  
**Melissa L. Maillette, BS, MA**

**1200 Washington Avenue**  
**Bay City, Michigan 48708**

**(989) 895-4009 Voice**  
**(989) 895-4014 Fax**  
**(989) 895-4049 TDD**

[www.co.bay.mi.us](http://www.co.bay.mi.us)



### HPV - Human Papillomavirus Vaccine

On June 8, 2006, the Food and Drug Administration licensed the first vaccine developed to prevent cervical cancer and other diseases in females caused by certain types of genital human papillomavirus (HPV). The vaccine protects against four HPV types which are responsible for 70% of cervical cancers and 90% of genital warts. This prophylactic vaccine, made from non-infectious HPV – like particles, offers a promising new approach to the prevention of HPV and associated conditions. However, this vaccine will not replace other prevention strategies since it will not work for all genital HPV types.

Ideally, the vaccine should be administered before the onset of sexual activity and is recommended for 11-12 year old girls, but can be administered to girls as young as 9 years of age. The vaccine is also recommended for 13-26 year old females who have not yet received or completed the vaccine series. Additionally, females who have already been infected with one or more HPV types would still get protection from the vaccine types they have not acquired. Very few young women are infected with all four HPV types in the vaccine. Currently, there is no test available for clinical use to determine whether a female has had any or all of the four HPV types in the vaccine.

The HPV vaccine should be delivered through a series of three intra-muscular injections over a six-month period. The second and third doses should be given 2 and 6 months after the first dose. Studies have found that the HPV vaccine is safe and causes no serious side effects. The duration of vaccine protection is unclear. Current five year studies indicate no evidence of waning immunity during the trial period. This information will be updated as additional data regarding the duration of immunity become available.

The recommendations for routine cervical cancer screenings has not changed for females who receive the HPV vaccine. Vaccine providers should notify vaccinated women that they should continue to receive regular cervical cancer screenings. Additionally, vaccinated women need to be informed that they should continue to practice protective sexual behaviors since the HPV vaccine will not prevent all cases of genital warts, nor will it prevent other sexually transmitted infections.

### SHINGLES VACCINE

On October 25, 2006 the CDC's vaccine advisory panel voted to make a Shingles vaccination routine for adults 60 and over. Shingles is a painful disease caused by reactivation of dormant varicella zoster virus, or VZV. Best known as the virus that causes chickenpox, VZV is a herpes virus that can come back with a vengeance when a person's immunity wanes with age, disease, or immunity-suppressing drugs. The risk for Shingles increases with age and can affect anyone who has had chickenpox at any time, without warning. A single dose of the shingles vaccine is recommended. Individuals should not be vaccinated if they have ever had a life-threatening allergic reaction to gelatin, have a weakened immune system or if they have an active case of Tuberculosis.

## IMMUNIZATION UPDATES, CONTINUED

### MENINGITIS VACCINE

Meningitis is an infection of the fluid of a person's spinal cord and the fluid that surrounds the brain. Meningitis is usually caused by a viral or bacterial infection. There are 2 vaccines available to prevent 4 types of meningococcal disease, including 2 of the 3 types most common in the U.S. Meningococcal vaccines cannot prevent all types of the disease. However, they do protect many people who might become sick if they didn't get the vaccine.

MCV4 is recommended for all children at their routine preadolescent visit (11 to 12 years of age). For those individuals not vaccinated at their preadolescent visit, a dose is recommended for high school or college entry, microbiologists who are routinely exposed to meningococcal bacteria, U.S. military recruits, anyone who has a damaged spleen or whose spleen has been removed, anyone who has terminal complement component deficiency (immune deficiency), anyone who is traveling to the countries which have an outbreak of meningococcal disease, and those who might have been exposed to meningitis during an outbreak.

#### REPORTED NUMBER OF COMMUNICABLE DISEASE CASES IN BAY COUNTY & THE STATE OF MICHIGAN FOR 2006 & 2007

(2007 represents January – August)

DISEASE	BAY COUNTY		MICHIGAN	
	2006	2007	2006	2007
Viral Meningitis	3	7	368	536
Bacterial Meningitis	1	0	62	89
Campylobacter	0	2	412	508
Cryptococcus	0	0	24	24
Giardiasis	1	4	319	366
Hepatitis C Chronic	28	18	3853	4190
Hepatitis C Acute	3	1	78	134
Hepatitis B Acute	0	0	79	94
Hepatitis B Chronic	2	3	909	1167
Hepatitis A	0	1	63	73
Legionellosis	1	2	51	104
Salmonellosis	2	4	485	627
Shigellosis	0	0	96	52
Pertussis	8	0	126	175
Tuberculosis	0	0	0	155
Escherichia coli 0157:H7	0	0	31	37
Chicken Pox (Varicella)	13	1	1528	2786
Mumps	1	0	16	19
AIDS, Adult	0	0	1	0
Chlamydia	136	141	17780	22211
Gonorrhea	15	26	7058	8615
Syphilis	0	0	63	9

MCV4 is the preferred vaccine for people 11 to 55 years of age in these risk groups, but MPSV4 can be administered if MCV4 is not available. MPSV4 is the only vaccine licensed for children 2 to 10 years of age and for adults older than 55 years of age who are at risk for meningococcal disease.

Meningitis cases should be reported to state or local health departments to assure follow-up of close contacts and recognize outbreaks.

### LEAD UPDATES

Do parents know the risks of lead exposure and are we asking the right questions? With the latest recall for so many toys, shouldn't all children be tested at minimum with a capillary test? Since 1990, the federal standard for lead poisoning has been 10ug/dl. At Bay County Health Department, lead counseling is provided for parents at a level of 5ug/dl or above. Nutritional and environmental changes are recommended to lower lead levels. Medical evidence shows that even low levels of lead can cause low IQ, learning disabilities, ADD, behavioral problems, stunted growth, impaired hearing and kidney damage. We are recommending all children under 6 years of age receive at least one lead screening test. By conducting lead test and providing education, we can make lead poisoning a thing of the past.

### RABIES FACTS

Rabies is a preventable viral disease of mammals most often transmitted through the bite of a rabid animal. The vast majority of rabies cases reported to the Centers for Disease Control and Prevention (CDC) each year occur in wild animals like raccoons, skunks, bats, and foxes. Dogs, cats, ferrets, and cattle can also contract rabies. An animal gets rabies from saliva, usually from a bite of an animal that has the disease.

Each year, rabies kills more than 50,000 people and millions of animals around the world. Although rabies among humans is rare in the United States, every year an estimated 18,000 people receive rabies preexposure prophylaxis and an additional 40,000 receive post exposure prophylaxis.

*\*Statistics in the communicable disease table were obtained from the Michigan Disease Surveillance System (MDSS), a secure web-based database that public health, health care, and medical laboratory professionals access to report communicable*

## PUBLIC HEALTH PREPAREDNESS AND INFECTIOUS OUTBREAKS

### CERT

CERT (Certified Emergency Response Team) is a training program that prepares you to help yourself, your family, and your neighbors in the event of a disaster. During an incident, emergency service personnel may not be able to reach everyone right away. By getting trained in CERT, you will have the skills to help emergency responders save lives and protect property.

As a member of a CERT team, you can respond to disasters, participate in drills and exercises, and take additional training. CERT teams are known and trusted resources to emergency responders and their communities. Under the direction of local emergency responders, CERT teams help provide critical support by giving immediate assistance to victims, providing damage assessment information, and organizing other volunteers at a disaster site. Volunteers trained in CERT also offer a potential workforce for performing duties such as shelter support, crowd control, and evacuation. The role of a CERT volunteer is to help others until trained emergency personnel arrive.

In addition to supporting emergency responders during a disaster, the CERT program builds strong working relationships between emergency responders and the people they serve. CERT teams also help the community year-round by helping with community emergency plans, neighborhood exercises, preparedness outreach, fire safety education, and workplace safety.

CERT training takes about 20 hours to complete. If interested, contact Dominic Smith at 989-895-2027.

### Volunteer Today!!!

#### MI Volunteer Registry

The MI Volunteer Registry is a database that functions as a central location for volunteer information. Individuals interested in volunteering will indicate their interests and contact information in this secure, electronic environment. Information can then be queried and appropriate volunteers contacted by authorized personnel via e-mail or text pager.

The registry intends to help meet the needs of hospitals and emergency responders when local resources are exhausted. Experience has shown that in an emergency,

overwhelming numbers of healthcare personnel are eager and willing to volunteer their services. MI Volunteer Registry seeks people with all skill levels and experiences. Although the focus is on physicians, nurses, pharmacists, behavioral health, emergency medical services personnel, and ancillary support staff, other targeted professions and skill sets include security, clergy, interpreters, food service, clerks, and electricians to name a few.

To learn more about the MI Volunteer Registry, visit: <http://www.mi.volunteerregistry.org>.

### RABIES FACTS, CONTINUED

Rabies virus infects the central nervous system, causing encephalopathy and ultimately death. Early symptoms of rabies in humans are nonspecific, consisting of fever, headache, and general malaise. As the disease progresses, neurological symptoms appear and may include insomnia, anxiety, confusion, slight or partial paralysis, excitation, hallucinations, agitation, hyper salivation, difficulty swallowing, and hydrophobia. Death usually occurs within days of the onset of symptoms.

There is no treatment for rabies after symptoms of the disease appear. However, two decades ago scientists developed an extremely effective new rabies vaccine regimen that provides immunity to rabies when administered after an exposure (post exposure prophylaxis) or for protection before an exposure occurs (preexposure prophylaxis).

If someone is exposed to a potentially rabid animal, the wound should be washed thoroughly with soap and water, and medical attention should be sought immediately. A health care provider will need to care for the wound and assess the risk for rabies exposure by determining the following:

- ✓ The geographic location of the incident
- ✓ The type of animal that was involved
- ✓ How the exposure occurred (provoked or unprovoked)
- ✓ How the patient cleaned the wound
- ✓ The date of last tetanus shot
- ✓ The vaccination status of animal
- ✓ Whether the animal can be safely captured and tested for rabies

Vaccinations should be kept up-to-date for all dogs, cats and ferrets. If a pet is bitten by an animal, owners will need to consult their Veterinarian. The animal may be unvaccinated and could be infected by rabies. If the animal's rabies vaccination status cannot be determined, the physician will need to consider starting the rabies vaccine series. Contact Bay County Animal Control (894-0679) to report a bite or stray dogs in your neighborhood.

### MODULAR EMERGENCY MEDICAL SYSTEM (MEMS) 101

The MEMS concept calls for the rapid organization of two types of expandable patient care modules, The Neighborhood Emergency Help Center (NEHC) and the Acute Care Center (ACC). These two modules will aid in the triage of healthcare needs to support surge capacity issues that are likely to be encountered within our communities. Utilizing NEHC's, the Bay County Health Department is working to develop effective strategies to distribute medication and/or vaccination to the citizens of Bay County in the event of an emergency.



1200 Washington Avenue  
Bay City, Michigan 48708

(989) 895-4009 Voice  
(989) 895-4014 Fax  
(989) 895-4049 TDD

*Creating A Healthy Environment  
For The Community*

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### MISSION

*We, at the Bay County Health Department, commit to providing Bay County residents with quality health care delivered by our qualified, compassionate staff. We believe in a holistic approach in promoting the optimal level of wellness in each individual.*

### GOALS

*The goal of public health administration is to establish and maintain a community focus on public health through the development of an efficiently organized, adequately staffed and effective Health Department.*

*The Health Department was created to meet the needs and the expectations of all citizens in Bay County. Many of the services are free of charge while others are based on income, eligibility criteria, and fee for service.*

*Funding provided by the Contagious Disease Grant from the Michigan Department of Community Health.*

**Bay County Health Department  
1200 Washington Avenue  
Bay City, Michigan 48708**

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